APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,133	02/02/2004	Todor G. Georgiev	07844-420002 / P384 C1	8833

21876	7590	11/14/2005

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EXAMINER
SAJOUS, WESNER

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/771,133	GEORGIEV ET AL.
	Examiner	Art Unit	
	Sajous Wesner	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *09 August 2004*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *27-39* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *27-39* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *09 August 2004* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/29/04*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.   Claims 27-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, and 12-17 of U.S. Patent No. 6765589, hereinafter the '89 patent. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application is somewhat a broader recitation of the claimed invention found in the '89

patent. All the claimed subject matters recited in the present application, for example in

claim 27, are also recited in, for example claim 1 and/or claim 12 of the '89 patent; thus

that the granting of the current application would in infringe with the claimed invention of

the '89 patent. For instances: the "receiving of a user input ... over the source image"

step and the claimed "source image having a plurality of regions... end point in the

region" recited in claim 27 of the instant application is met by preamble section and the

"defining a path... brush cursor" step recited in claim 1 and/or claim 12 of the '89 patent;

the claimed "modifying each distortion vector... brush cursor" is read in the modifying

step of claim 1 and/or claim 12 of the '89 patent; and the "modifying the source image

... warping effect" is met by the sampling step recited in the '89 patent.

The omitted elements (the receiving user input specifying a movement in a

graphical user interface of a brush recited in claim 27) in the instant claimed invention

would not interference with the functionality of the previously claimed elements in the

'89 patent and thus would perform the same functions of—generating a destination

image having a warping effect)--. See In re Carlson 136 USPQ 184 (CCPA) 1963. Thus,

with respect to the above discussions, it would have been obvious to an artisan skilled

in the art at the time the invention was made to have used the teaching of claims 27-39

of the '89 patent as a general teaching for generating a destination image having a

warping effect; in order to perform the same functions as claimed in the present

application. The '89 patent and claims obviously encompass the claimed invention of

the instant application and differ only in terminology and broader steps. The extent that

the '89 patent claims are broaden and therefore generic to instant claimed invention

[species], In re Goodman 29 USPQ 2d 2010 CAFC 1993, states that a generic claim

cannot be issued without a terminal disclaimer, if a species claim has been previously

been claimed in a patent.

Claims 28-37 and 39 contain the features of claim 2-6, and 13-17 by

dependence; they are therefore, similarly rejected.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

5.   Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kroitor US Pat. No. 5,854,634.

Considering claims 27 and 28, Kroitor discloses defining a user input specifying a

movement in a graphical user interface of a brush cursor (see col. 6, lines 36-46), the

source image (e.g., he fish) having a plurality of regions, each being associated with a

distortion vector that has an end point (E) in the region (as defined by fig. 4); modifying

each distortion vector (e.g., the transformation velocity depicted in figs. 4-7) having

originations (e.g., starting point S, see fig. 4) that is under the cursor during the

movement, the distortion vector being modified according to a direction of movement of

the brush cursor; and modify the source image using the distortion vectors... (e.g., via *a user selected displacement point, as described in col. 9, line 7 to col. 11, line 49, particularly col. 10, lines 12-25 in light of col. 6, lines 16-67*). In addition, Kroitor, at fig. 4, discloses sampling a source image (*i.e., the fish's mouth, fig. 4 or the eyebrows, fig. 5*) using the distortion vectors (*i.e., transformation vectors from point S to point E, including distortions at point 1, 2, 3, and 4*) to produce a destination image (see figs 8{a-c}). See also col. 9, lines 7-15.

It is noted that Kroitor lacks explicit recitation for the repeating the modification of the distortion vectors and the modification of the source image in response to receiving user input specifying additional movement of the brush cursor so as to produce a source image having a warping effect.

However, Kroitor, at col. 12, lines 5-10, suggests that the transformation velocity profile may be redrawn by the animator, multiple sync points are used along a transformation graph, and that the same procedure is followed for each point, to eliminate discontinuity noticeable to a user. It is to be appreciated by those of artisan skilled in the art, in evaluating the depiction of Kroitor, that in applying the same procedure again for each point, including the redrawing of velocity profile by the animator, among the sync points along the transformation graph, the animator, by means of a cursor or brush movement, would have to select a point as a starting point before the shape of the velocity profile can be readjusted or redrawn by, in order to create motion in the animation sequence. This procedure can be applied for each point along the transformation graph until the proper animation sequence is created. It is to

be understood by those of common knowledge in the art that the displacement of such

a point from its initial position along a line segment may define a path segment vector. It

should also be appreciated by those of artisan skilled in the art that during motion of an

animation sequence, a warping effect is produced by the created image via the

transformation velocity. See also col. 3, line 44 to col. 4, line 44 for further

characterization defining the modifying, repeating and production of warping effect

steps.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Kroitor's system, wherein the computer assisted

animation system of Kroitor including the transformation graph with velocity profiles

would incorporate and implement the use of defining a path segment vector and

modifying the distortion vectors or the transformed velocity profiles, in the sane

conventional manner as described in col. 12, lines 5-10 to create motion in the

animation sequence. The advantage would be to eliminate discontinuity in the animation

sequence that is noticeable to a viewer (*col. 12, lines 5-10*), and to permit an animator

to create high quality animation simply and intuitively (*see Kroitor col. 2, lines 20-21*).

Re claims 29-30, Kroitor discloses sample the movement of the brush cursor to

generate a series of brush applications and for each brush application and each

distortion vector having an end point under the brush cursor at the brush application,

generate a path segment vector, the direction of each path segment vector

corresponding to the direction of the brush cursor at the brush application; and modify

the distortion vectors using the path segment vectors, wherein the direction and the

movement of the brush cursor are sampled at regular intervals. See col. 9, line 7 to col. 11, line 49.

Re claim 32, Kroitor fails to teach that each path segment vector has a magnitude determined by a corresponding speed of the movement of the brush cursor. However, it is noted that since the Applicants, in the disclosure or claim, fail to provide any specific reason, advantage or benefit of why having a path segment vector with a magnitude determined by a corresponding speed of the movement of the brush cursor would distinguish over transformation vector of the prior art (see figs. 4-7); it is, therefore, the Examiner's broad interpretation that such path segment magnitude and speed of cursor movement in Kroitor is simply a matter of design's choice. For the intuitive movement of cursor by the user along the path of a line segment in Kroitor is relative to magnitude and speed call for in the claim. This process would not perform differently than the prior art devices. Instead, they'd provide the same end result; i.e., provide a destination image having a warping effect (see col. 3, line 44 to col. 4, line 44). See, re Rinehart, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976), and In re Gardener v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984).

The rejections of claim 27 are incorporated herein with respect to claim 38.

The rejections of claim 29 are incorporated herein with respect to claim 39.

Allowable Subject Matter

7.   Claims 33-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims, because the prior art of record fail to teach

the instructions to modify each distortion vector are operable to cause the data

processing apparatus to sample the movement of the brush cursor to generate a series

of brush applications and for each brush application and each distortion vector having

an end point under the brush cursor at the brush application, generate a path segment

vector, the direction of each path segment vector corresponding to the direction of the

brush cursor at the brush application; and modify the distortion vectors using the path

segment vectors, wherein each a path segment vector has a magnitude determined by

a corresponding speed of the movement of the brush cursor, and the instructions cause

the data processing to scale the magnitude of each path segment vector by a scaling

factor that is a fraction that is less than one (as recited in claim 34); wherein the cursor

has associated brush pressure values that determine a strength of the brush cursor a

each region of the source image covered by the brush and the instructions to generate

the path segment vectors are operable to cause the data processing apparatus to

generate path segment vectors for each region having a magnitude determined by the

strength of the brush cursor for the region (as recited in claim 35).
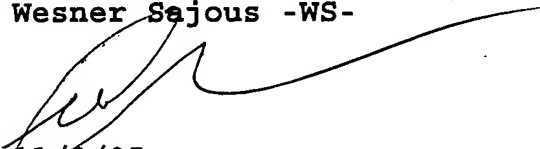

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sajous Wesner whose telephone number is 571-272-

7791. The examiner can normally be reached on Mondays thru Fridays between 11:00

AM and 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wesner Sajous -WS-

11/9/05